



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Am

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,840	01/16/2002	Glenn F. Evans	MSI-1024US	1880

22801 7590 06/24/2005
LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER

LEMMA, SAMSON B

ART UNIT PAPER NUMBER

2132

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,840

Applicant(s)

EVANS, GLENN F.

Examiner

Samson B. Lemma

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-50 and 56 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☐ Claim(s) 42-50 and 56 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/04 & 10/02.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. **Claims 1-41; 51-55 and claims 57-84** have been cancelled by the applicant and the remaining **claims 42-50 and 56 have been examined.**

Preliminary Amendment

2. The preliminary amendment filed by the applicant on January 27, 2005 regarding the cancellation and retention of some of the claims have been acknowledged. Accordingly, **claims 1-41, 51-55 and 57-84 have been cancelled** by the applicant and the remaining **claims 42-50 and 56 have been retained/examined.**
3. Acknowledgement is made of Information Disclosure document filed on October 15, 2002 and December 27, 2004.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. **Claims 42, 44, 46, 48, 50 and 56** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The above claims recite the limitation, "...**portions of memory**". This is not only vague and unclear but also does not have a well-defined meaning. Accordingly, the limitations in the above claims should be corrected/specified so that there

Art Unit: 2132

would not be any ambiguity. For the purpose of examination, ...**"portion of memory"** is interpreted by the office as just a **"memory"**

6. **Claims 43,45,47 and 49** depend from rejected claims **42, 44 and 46** and include all the limitations of the respective claim, thereby rendering those dependent claims indefinite.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 42-50 and 56** are rejected under 35 U.S.C. 102(b) as being anticipated by **Derek L. Davis**. (hereinafter referred to as **Davis**) (U.S. Patent No. 6,064,739) (Submitted IDS).

9. **As per claims 42, Davis** discloses a method comprising:

- Providing one or more key pairs, individual key pairs comprising an encryption key that can be used to encrypt data and a decryption key that can be used to decrypt data encrypted with the encryption key;[column 5, lines 42-44; column 41-49; Column 2, lines 19-29] **[As for instance, explained on column 5, lines 42-44, the frame data encryptor shares "frame data keys"/key pairs with a frame data decryptor also located within the SVCP. The frame data decryptor using the corresponding key/key pairs decrypts the data which is encrypted by the frame data encryptor as explained on column 5, lines 37-56 and shown on figure 3A or 3B reference 320 & 324 and figure 4, reference 424 & 444]**

Art Unit: 2132

- Associating individual key pairs with the memory that comprise part of a video memory. [Column 5, lines 42-44; Figure 3B, reference "320"; reference "324" and reference "302"] [**As for instance, explained on column 5, lines 42-42, the frame date encryptor has encryption key which is used by the Frame Data Encryptor which is also associated with the memory/frame buffer shown on figure 3A or 3B reference "320" and figure 4, reference "424" and the corresponding decryption key which is used by Frame Data Decryptor is also associated with the memory/frame buffer as shown on figure 3A/3B reference "324" and figure 4, reference "444".**]
10. **As per claims 43, Davis** discloses a method as applied to claim 42 above. Furthermore, **Davis** discloses the method wherein, said acts of providing and associating are performed on a video card. [Column 3, lines 53-62; column 4, lines 30-34; Figure 3A, reference "SVCP"]
11. **As per claims 44-45, Davis** discloses a method as applied to claim 42 above. Furthermore, **Davis** discloses the method wherein, said acts of associating comprises defining a table/memory controller on the video card, the table/memory controller having individual entries that associates individual key pairs with the memory.[Column 5, lines 42-49; Figure 3B, reference "320" and reference "324"]
12. **As per claim 46, Davis** discloses a method as applied to claim 42 above. Furthermore, **Davis** discloses the method further comprising using an encryption key to encrypt data that is stored in associated memory.[column 6, lines 15-17; figure 4, reference "424"]

13. **As per claim 47-48, Davis** discloses a method as applied to claim 42 above.

Furthermore, **Davis** discloses the method wherein the act of using is performed prior to transferring the data off of the video card.[Column 6, lines 52-56]

14. **As per claim 49, Davis** discloses a method as applied to claim 42 above. Furthermore, **Davis** discloses the method further comprising using a decryption key to decrypt data that has been received over a bus external to the video card.[Column 6, lines 55-56]

15. **As per claim 50, Davis** discloses a method as applied to claim 49 above. Furthermore, **Davis** discloses the method further comprising providing the decrypted data in a memory associated with the decryption key that was used to decrypt the encrypted data.[Figure 3B, reference "324"]

16. **As per claim 56, Davis** discloses a method comprising:

- Reading data from the memory on a video card, having an associated encryption/decryption key pair. [Column 6, lines 29-30][**As data is needed by the display device shown on figure 4, reference 440, data is retrieved/read from the memory/data frames and this data which was encrypted by the frame data encryptor using the encryption key shown on figure 4, reference 424 has an associated, decryption/key corresponding to the encryption key and used by the frame data decryptor shown on figure 4, reference "444"**]
- Recording key pairs associated with the memory from which data was read; [Column 6, lines 38-41; Column 5, lines 42-44 and 42-56] [**key pairs/ which are associated by the frame buffer and which are used by the frame data encryptor and the corresponding frame data decryptor are inherently recorded to perform a bidirectional authentication which is explained on column 6, lines 34-51**]
- Operating on the data read from the memory to provide output data.[Column 6, lines 31-33][**A decryption/operation is performed on the data reterived/read**

from the memory or the buffer to provide output data to the display device shown on figure 4, reference "440" and explained on column 6, lines 31-33]

- **Ascertaining whether the key pairs associated with the memory which the data was read are equivalent to a key pair associated with the video memory that is to server as a destination for output data.[Column 6, lines 34-51][The IGD shown on figure 4 reference "404" ascertains that an appropriate IDD shown on figure 404 that is to serve as a destination for out put data is in place before transmitting the session keys which enables the IDD shown on figure 4 reference 404 to decode the data. In other words if the key which is used by the frame data decryptor to read/retrieves the data from the frame buffer/memory is not the same as the corresponding encryption key/key pairs that is used to encrypt the data then the frame data decryptor will not be able to decrypt the data and out put the data in to the destination video memory portion shown on figure 4, reference "406" that converts the successfully decrypted data in to analog signal and transmit the data to the appropriate display/output.]**

and

- **If the key pairs are equivalent, providing the output data into the destination video memory. [column 6, lines 49-51] [After authentication, the frame data decryptor will be able to successfully decrypt the data and provide the decrypted/out put data into the destination video memory portion shown on figure 4, reference "406" that converts the successfully decrypted data in to analog signal and transmit the data to the appropriate display/output.]**

Conclusion

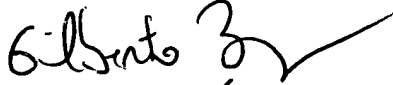
Art Unit: 2132

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.(See PTO-Form 892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAMSON LEMMA
S.L.
06/15/2005


GILBERTO BARRON JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100